

## THE MADRONA APHIS

BY E. O. ESSIG

*University of California, Berkeley***Anuraphis madronæ** Essig, n. sp.

This new species was collected from the bark of the Madrona,<sup>1</sup> *Arbutus menziesii* Pursh., growing along Cache Creek two miles above Rumsey, California, by J. F. Lamiman and the writer, on May 21, 1925. It occurred in small or large, dense colonies on the trunks and larger limbs from the surface of the ground to a height of six or eight feet. At the time the collections were made nearly all of the individuals were apterous, and it was only after a long and arduous search that four alate specimens were taken. The colonies were usually located by following the large numbers of ants which were always present on the infested trees. The writer has had no opportunity to return to the original locality, but has looked elsewhere without securing other material.

*Alate* (Type): General color a reddish brown throughout, matching to a remarkable degree the color of the reddish bark of the madrona trees. Length of body to tip of cauda, 1.54 mm.; width of thorax, 0.71 mm.; width of abdomen, 0.78 mm. Antennæ slightly longer than the body with many spines; imbricated; length of segments: I, 0.65 mm.; II, 0.78 mm.; III, 0.273 mm.; IV, 0.221 mm.; V, 0.156 mm.; VI, 0.364 mm. (base, 0.091 mm., filament, 0.273 mm.). Sensoria circular, small and large, distributed as follows: III, right 5; left 7, IV, none; V and VI, normal. Rostrum, 3 mm. long. Wings normally veined; front, 2.6 mm. long; hind, 1.5 mm. long; cauda conical; width of base and length about equal; length, 0.14 mm. Cornicles slightly swollen basad of the middle, flaring at tip, slightly imbricated, 0.26 mm. long.

Winged paratypes show the following variations in the number of sensoria on segment III of the antennæ: No. 1, right 11, left 8; No. 2, right 5, left 6; No. 3, right 6, left 5.

*Apterous* (paratype No. 1). Apparently fully matured, robust. Color same as the winged form. Length, 2.14 mm.; width, 1.49 mm. Antennæ, 1.08 mm.; rostrum, 0.54 mm. Cornicle, 0.35 mm.; slightly imbricated. Cauda, 0.13 mm., same general shape as that of the type.

Type and paratypes in my collection at the University of California.

<sup>1</sup> This plant goes under the various common names of madrona, madrone, madroño.